

REMARKS

Claims 12-23 are pending in the application and are at issue.

Claims 13-23 are objected to for depending from a cancelled claim. The claims have been amended to depend from claim 12. Claim 23 also has been amended to correct the obvious typographical error noted by the examiner. In view of this amendment, it is submitted that the objection to the claims should be withdrawn.

Claims 12, 13, 15, 16, 18, and 21-23 stand rejected under 35 U.S.C. §102(b) as being anticipated by, or in the alternative under 35 U.S.C. §103 as being obvious over, JP 07-292023 (JP '023). It is submitted that this rejection is in error and should be withdrawn.

JP '023 also was addressed in a response to the International Preliminary Examination Authority in connection with the PCT application from which the present application claims priority.

In particular, the present invention is directed to a *mixture* of (i) a claimed hydrogel-forming polymer and (ii) a claimed copolymer having a claimed molar ratio of monomers. In particular, see Inventive Examples 1-5 at pages 39 and 40 of the English-language specification, which clearly show that the claimed invention is to a mixture.

In contrast, JP '023 clearly teaches *cross-linking* (I) a salt of a maleic anhydride containing copolymer and (II) a copolymer comprising an acrylic acid amide as one of the monomers. JP '023, therefore,

does not teach a mixture of polymers, but rather a single copolymer prepared by linking together (via crosslinking) two individual copolymers. The cross-linked copolymers of JP '023, therefore, correspond only to component (i) of the claimed invention. JP '023 does not teach or suggest a presently claimed component (ii).

JP '023 also discloses resins which have been produced by crosslinking a salt of an isobutylene/-maleic anhydride copolymer, i.e., copolymer (I), with another copolymer (II). These salts are obtained by reacting the isobutylene/maleic anhydride copolymer with an alkali compound. In other words, the anhydride groups are hydrolyzed (i.e., "saponified") prior to mixing and crosslinking with the other copolymer (II).

In a JP '023 example, 20 g of a 1:1 copolymer of isobutylene and maleic anhydride are reacted with 8 g of caustic soda (NaOH). The molecular weight of the polymer recurring unit is 154 and the molecular weight of NaOH is 40. Therefore, 130 mmol of maleic anhydride units were reacted with 200 mmol of NaOH. Accordingly, no maleic anhydride rings are present in the copolymer salt of the JP '023 example. The anhydride rings have been cleaved to acid groups, 80% of which are in the form of alkali salt.

In contrast, the presently claimed invention has anhydride groups present in copolymer (ii). This is an important feature of the present invention because the anhydride rings react with malodorous compounds, such as ammonia (see page 9, lines 13-19), and, therefore, provide the odor control properties of the

polymer mixture of the present invention. This deodorizing effect cannot be achieved using salts of anhydride-based copolymers, as disclosed in JP '023.

Therefore, differences exist between the JP '023 disclosure and the present claims such that JP '023 cannot anticipate the present claims under 35 U.S.C. §102(b). Furthermore, the differences between JP '023 and the present claims are nonobvious differences.

JP '023 not only fails to teach or suggest a mixture of copolymers, but JP '023 also fails to teach or suggest a component (ii) as recited in the present claims. Further, JP '023 specifically teaches saponification of the anhydride groups and does not teach or suggest maintaining the anhydride moiety of the copolymer.

JP '023, therefore, provides no motivation or incentive for a person skilled in the art to make the numerous jumps in reasoning that are required to arrive at the presently claimed invention. In particular, JP '023 provides no motivation to provide a mixture of copolymers as opposed to crosslinking two individual copolymers, to include a presently claimed copolymer (ii), or to maintain the anhydride functionality rather than form the disclosed salt, let alone all three of these modifications. Accordingly, the present claims would not have been obvious to a person skilled in the art over the disclosure of JP '023.

In summary, it is submitted that the present claims are neither anticipated by nor obvious over JP '023, and that the rejection of claims 12, 13, 15, 16,

18, and 21-23 should be withdrawn. For the same reasons, objected-to claims 14, 17, 19, and 20 also are allowable over JP '023.

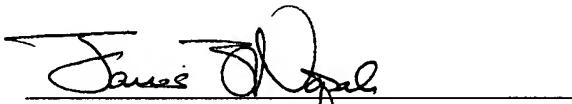
The claims, therefore, are in a form for allowance. An early and favorable action on the merits is respectfully requested.

Should the examiner wish to discuss the foregoing, or any matter of form in an effort to advance this application toward allowance, the examiner is urged to telephone the undersigned at the indicated number.

Respectfully submitted,

**MARSHALL, GERSTEIN & BORUN LLP**

By



James J. Napoli  
(Registration No. 32,361)  
Attorneys for Applicants  
6300 Sears Tower  
233 South Wacker Drive  
Chicago, Illinois 60606  
(312) 474-6300

Chicago, Illinois  
March 7, 2006